



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/850,996 05/05/97 LYDECKER

G 3464/3

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WM02/0522

EXAMINER

MEI, X

ART UNIT

PAPER NUMBER

2644

13

DATE MAILED:

05/22/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/850,996

Applicant(s)
Lydecker et al.

Examiner
Xu Mei

Art Unit
2644



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Mar 5, 2001

2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-17 and 21-38 is/are pending in the application

4a) Of the above, claim(s) 15-17 is/are withdrawn from consideration

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-14 and 21-38 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirements

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

20) ☐ Other: _____

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DETAILED ACTION

1. This communication is responsive to the applicant's amendment dated 03/05/2001.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 13, 21-25, 30, 31-32 and 33-38 are rejected under 35 U.S.C. 102(b) as being anticipated by the entire series of Davis et al. (See US-5,583,962, 5,632,005, 5,633,981, 5,909,664, hereinafter, Davis).

Davis discloses an encoder/decoder for multidimensional sound fields which comprises a decoder, i.e., demultiplexer as claimed, arranged to separate the encoded/stored composite audio-information signal representing the sound field to be reproduced and a steering control signal (audio and control data as claimed). The composite audio-information signal is a multichannel subband signal and the steering signal represents

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various components of sound quality characteristics such as frequency range, amplitude level, harmonic amplitude and phase, etc. with regard to the original sound signal, i.e., the composite audio-information signal. The various audio signal processing circuit as claimed would have inherently included for reconstructing the composite audio-information signal back to its original form.

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-6 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis.

Regarding claims 5-6 and 28-29, audio signal compensation including active noise cancellation (ANC) system (auto volume control according to ambient noise, for example) is old and well known in the audio art. It would have been obvious to one of ordinary skill in the art to modify the system taught by Davis

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with a well known ANC system in order to generates clearer audio output with the system including auto ambient noise control capability.

6. Claims 7-12 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Begault (US-5,438,623).

Regarding claims 7-12 and 26-27, The decoded audio signal of Davis clearly can be outputted as a stereophonic signal (i.e., two channels output) for individual as shown in Fig. 1. Begault discloses a HRTF audio reproducing system with a loop closing subsystem interfaced to a playback system with delay means, signal (i.e., test or any type of audio signal) generator, precision microphones for producing a sound output corresponding to received audio processed signal to increase stereophonic effect of the audio signals perceived by the listener. It would have been obvious for one of ordinary skill in the art to combines the teachings of Davis and Begault in order to have an improve audio reproduction system with greater stereophonic perception effect for the listener.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Scheiber (`839, `728) and Kishii et al are made of record here as pertinent art to the claimed invention.

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8. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

9. Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for formal communications; please mark
"EXPEDITED PROCEDURE")

Or:

(703) 872-9314 (for informal or draft communications, please
label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is (703) 308-6610.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.



XU MEI
PRIMARY EXAMINER

Group 2600
05/15/2001